

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

### **Listing of Claims:**

1. (Original) A tuning fork type crystal unit comprising:
  - a base; and
  - a pair of arms extending from respective ends of said base in a crystallographic Y direction of quartz crystal;
  - each of said arms comprising a first crystal member and a second crystal member which extend in said crystallographic Y direction, said first crystal member and said second crystal member being joined to each other in a crystallographic YZ plane by a direct bonding such that said first crystal member and said second crystal member have respective crystallographic X directions oriented away from each other and extending parallel to each other.
2. (Original) The crystal unit according to claim 1, wherein each of said arms has excitation electrodes disposed respectively on a pair of exposed surfaces thereof which lie in said crystallographic YZ plane.
3. (Original) The crystal unit according to claim 1, wherein said base comprises a third crystal member, said arms and said third crystal member being joined to each other by a direct bonding.
4. (Original) The crystal unit according to claim 1, wherein said direct bonding comprises a siloxane bond by which said first crystal member and said second crystal member are joined to each other.

5. (Original) The crystal unit according to claim 2, wherein said excitation electrodes are wired to cause said arms to produce tuning fork vibrations.
6. (Original) A bar type crystal unit extending in a crystallographic Y direction of quartz crystal, comprising a first crystal member and a second crystal member which extend in said crystallographic Y direction, said first crystal member and said second crystal member being joined to each other in a crystallographic YZ plane by a direct bonding such that said first crystal member and said second crystal member have respective crystallographic X directions oriented away from each other and extending parallel to each other.
7. (Original) The crystal unit according to claim 6, further comprising excitation electrodes disposed respectively on a pair of exposed surfaces of said first crystal member and said second crystal member which lie in said crystallographic YZ plane.
8. (Original) The crystal unit according to claim 6, wherein said direct bonding comprises a siloxane bond by which said first crystal member and said second crystal member are joined to each other.

9. (New) A tuning fork type crystal unit, comprising:

a base;

a pair of arms extending from respective ends of said base in a crystallographic Y direction of quartz crystal, wherein each of said arms includes a first crystal member and a second crystal member which extend in said crystallographic Y direction, said first crystal member and said second crystal member being joined to each other in a crystallographic YZ plane by a direct bonding such that said first crystal member and said second crystal member have respective crystallographic X directions oriented away from each other and extending parallel to each other; and

a pair of inner and outer electrodes disposed on exposed surfaces of each of said pair of arms which lie in said crystallographic YZ plane, wherein said electrodes are wired such that when one potential is applied to a first outer electrode on a first arm of said pair of arms and a second outer electrode on a second arm of said pair of arms, an inverse potential is applied to a first inner electrode on said first arm and a second inner electrode on said second arm.